

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: A01N 59/16, G01N 21/45, A61L 15/18, 31/00, A61F 13/00	A3	(11) International Publication Number: WO 98/41095 (43) International Publication Date: 24 September 1998 (24.09.98)
(21) International Application Number: PCT/CA98/00102 (22) International Filing Date: 17 February 1998 (17.02.98) (30) Priority Data: 08/818,869 17 March 1997 (17.03.97) US (71) Applicant (for all designated States except US): WESTAIM TECHNOLOGIES INC. [CA/CA]; 10102 - 114 Street, Fort Saskatchewan, Alberta T8L 3W4 (CA). (72) Inventors; and (75) Inventors/Applicants (for US only): BURRELL, Robert, Ed- ward [CA/CA]; 52055, R.R. 221, Sherwood Park, Alberta T8E 1C6 (CA). PRBCHT, Roderick, John [CA/CA]; 13143 - 34 Street, Edmonton, Alberta T5A 3K1 (CA). (74) Agent: McKAY-CAREY, Mary, Jane; McKay-Carey & Com- pany, 2125 Commerce Place, 10155 - 102nd Street, Edmon- ton, Alberta T5J 4G8 (CA).	(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims</i> <i>and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 11 March 1999 (11.03.99)	

(54) Title: ANTI-MICROBIAL COATINGS HAVING INDICATOR PROPERTIES AND WOUND DRESSINGS**(57) Abstract**

Multilayer anti-microbial materials formed to produce an interference colour, and thus an indicator of anti-microbial effect, are provided. The materials include a partly reflective base layer and a partly reflective, partly transmissive top layer balanced to produce an interference colour. The top layer is formed from an anti-microbial metal with atomic disorder. Dissolution or a change in composition of the top layer on contacting an alcohol or electrolyte causes a change in optical path length so as to produce a change in the interference colour of the material. Multilayer, laminated wound dressings are also provided. The dressing includes a first and second layer, and preferably a third layer. The first and third layers are formed of perforated, non-adherent materials and most preferably carry an anti-microbial coating as above. The second layer is sandwiched between the first and third layers and is formed of an absorbent material. At least one of the layers is formed from a plastic material. The layers are laminated together by ultrasonic welds spaced intermittently on the dressing to allow the dressing to be cut to size with delaminating.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav	TM	Turkmenistan
BF	Burkina Faso	GR	Greece		Republic of Macedonia	TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand		
CM	Cameroon		Republic of Korea	PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakhstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LT	Lithuania	SG	Singapore		